Ten Common Inferences
Part I. The Perils of Oscar

When Oscar the Pig found out that Farmer McDonald intended to run him through his hot dog machine to turn a profit, Oscar decided the logical thing to do would be to run. And so he ran. But to escape Bacon County he has to prove along the way his powers of logical reasoning to a group of traffic-controlling policemen who are intent on foiling his escape...

Your role in this scenario is to help Oscar escape across the county line by answering questions that involve distinguishing between valid and invalid inferences. This program, part one of a two part series, presents two common valid and two common invalid patterns of reasoning, with remedial help as needed.

This program is appropriate for undergraduate classes in which logical thinking concepts form an important part. In addition it is quite appropriate for home use.
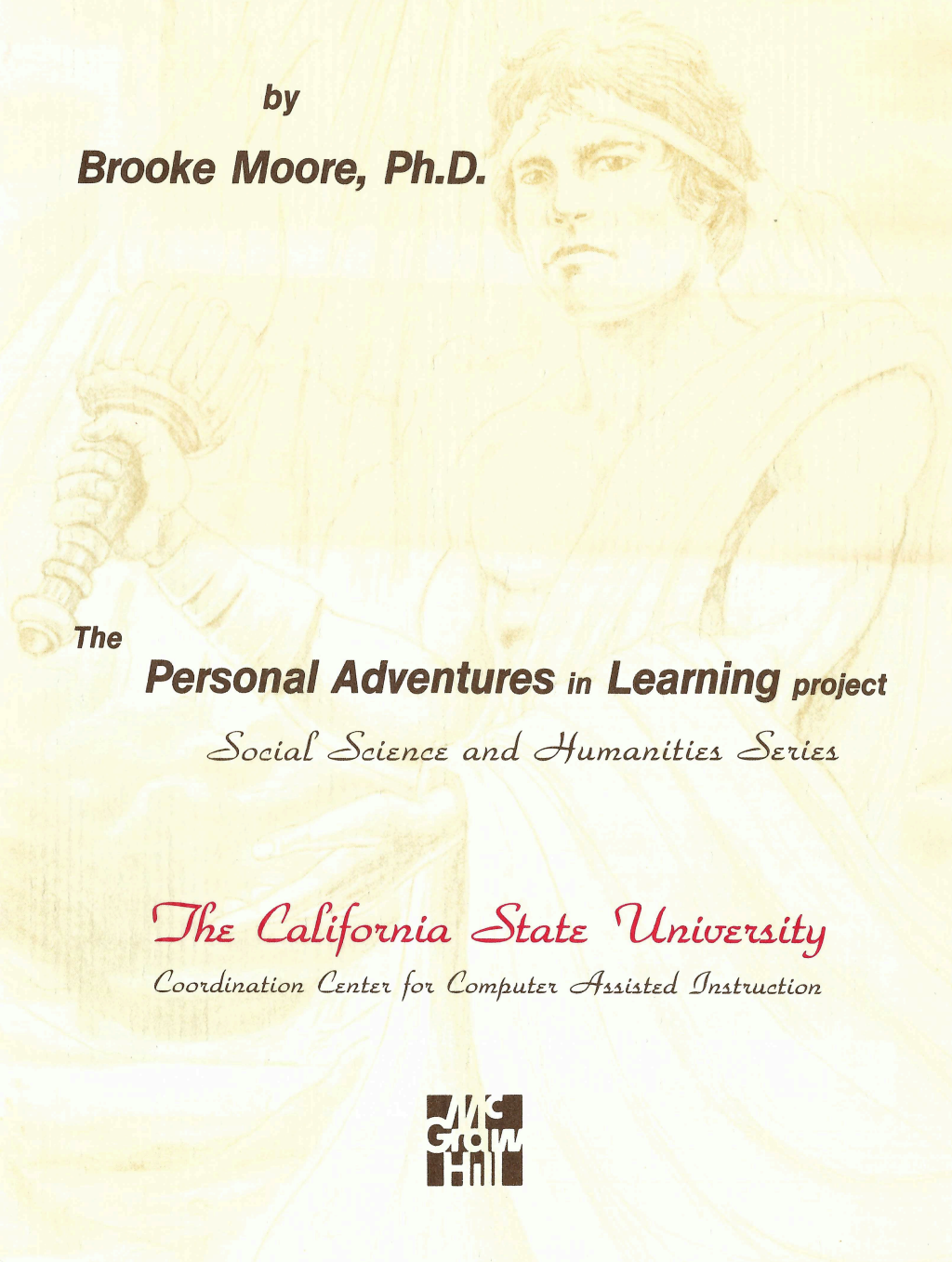
Apple II+ or IIe, 64K

The

Personal Adventures in Learning project

Social Science and Humanities Series

The California State University

Coordination Center for Computer Assisted Instruction

TEN COMMON INFERENCES
PART 1. THE PERILS OF OSCAR

by

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GENERAL INSTRUCTIONS

To use this program, an Apple II Plus or Apple IIe computer with 64,000 characters of memory and one disk drive is required. To run any of The California State University programs on a DOS 3.3 system, just put the diskette in the disk drive and turn on the Apple. The program will do the rest. If the RESET key is accidentally depressed, the program will start over.

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Description

The purpose of this program is to provide undergraduate students of all disciplines an opportunity to develop the ability to distinguish between valid and invalid patterns of reasoning. In the lesson, the first of a two part series covering a total of ten inferences, the student will study four common categorical inferences, two of which are valid and two of which are invalid. To help motivate the student, the learning occurs within a colorful scenario depicting the adventures of Oscar the Pig as he tries to escape from Bacon County and Farmer McDonald's evil hot dog machine.

To escape across the county line Oscar must pass through ten traffic lights, the first four of which he attempts in this program. At each signal there is a policeman who will allow Oscar to pass only after he has correctly answered a question. The student helps Oscar by telling him the correct answers, which are reached through logical thinking. If the student needs help or answers a question incorrectly, he or she leaves Oscar anxiously waiting at the signal and receives a more detailed explanation of the inference at hand. During the program's climax, the student's ability to differentiate the four common inferences is further tested.

Target Audience

This tutorial is designed for undergraduate students in classes in which logical thinking concepts form an important part. It is also quite appropriate for use in the home.

Instructional Goal

Students will be able to recognize two common valid reasoning patterns and two common invalid reasoning patterns, as these patterns occur in simple English arguments.

Student Controlled Parameters

Students may elect to take any of the actions listed below.

1. Answer YES or NO to a question posed by the policeman.

2. GO BACK to a previous section of the lesson.

3. Obtain a HINT from the lesson when a hint is available.

4. Turn the sound off at the beginning of the lesson.

5. Increase the display rate of the text on the screen by pressing any key while the text is printing.

6. STOP the lesson entirely.

Suggested Uses

1. The program can be used to supplement instruction in all classes in which critical thinking skills are important.

2. The program can supplement classroom instruction in classes in which logic is a main topic.

Prerequisites

None.

References

1) Copi, I. M. Introduction to logic, sixth edition. New York: MacMillan Publishing Co., 1982.

2) Kahane, H. Logic and philosophy, third edition. San Francisco: Wadsworth Publishing Co., 1978.

3) Munson, R. The way of words. Boston: Houghton Mifflin, 1976.

4) Salmon, M. Logic and critical thinking. New York: Harcourt, Brace, Jovanovich, 1984.

This courseware is the first part of the two program package on common inferences in which you will meet Oscar the Pig and help him escape from Bacon County and Farmer McDonald's evil hot dog machine. To escape across the county line, Oscar must pass through ten traffic signals, the first four of which are attempted in this program. Each light is guarded by a policeman who will allow Oscar to pass only after he correctly answers a question. Your role is to tell Oscar the correct answers to the questions.

The answers to the questions are reached through logical thinking. In each unit of instruction there are two look-alike patterns of reasoning, one valid and one invalid. Your goal is to discriminate between the valid and invalid reasoning patterns. If you need help, hints are available from the program.

Upon successful completion of the program, Oscar will have passed through four of the ten traffic lights and you will be able to recognize four common inferences. Oscar's escape adventure is continued in "Ten Common Inferences, Part 2. Oscar the Big Escape!", if you would like to help him on to safety.

NOTES